

### AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A device for controlling an imaging lens position, which performs a control of focusing based on a distribution of high-frequency components of image signals in a frame, ~~which is acquired according to a focus lens position~~, comprising:

an acquirer ~~that for information relating to a lens position of a peak focus, which~~ acquires information relating to a lens position of a peak focus, said information indicating which indicates a focus lens position at which, in which an integration value of said high-frequency component in a predetermined area in said frame assumes a peak;

a storage that first storage, which stores information relating to the distribution a ~~distribution of high-frequency components, which indicates a distribution of said high-frequency components at the~~ at a focus lens position indicated by the information relating to the lens position of the ~~a lens position of a peak focus, in which the information relating to the distribution a distribution of high-frequency components being correlated is correlated with the~~ information relating to the lens position of the ~~a lens position of a peak focus, which is acquired by the acquirer for information relating to a lens position of a peak focus;~~

an acquirer ~~that for selection information, which acquires selection information indicating which information relating to the distribution a distribution of high-frequency components stored by the the first storage is selected based on the information relating to the distribution a distribution of high-frequency components stored by the the first storage; and~~

a determinator that determines, when a plurality of information relating to the lens position of the peak focus have been acquired, the for an imaging lens position, which determines an imaging lens position, the focus a focus-lens position for imaging, based on the

information relating to the lens position of the ~~a lens position of a peak focus~~ correlated with the information relating to the distribution ~~a distribution~~ of high-frequency components and stored in the ~~the~~ first storage,

\_\_\_\_\_ wherein the selection information acquired by the acquirer that acquires ~~for~~ selection information indicates that the information relating to a distribution of high-frequency components has been selected.

2. (Currently Amended) The device for controlling an imaging lens position according to Claim 1, wherein

information relating to the distribution ~~a distribution~~ of high-frequency components indicates a size of the ~~the size of a~~ high-frequency component corresponding to respective positions of a predetermined area in the ~~a~~ frame; and

said acquirer for selection information comprises:

means for computing a high-frequency component index, which computes a high-frequency component index indicating the ~~indicating a distribution of high-frequency components in a relationship with the a-predetermined position in the frame; and~~

means for generating selection information dependent on the high-frequency ~~a high-frequency~~ component index, which generates selection information based on the high-frequency component index.

3. (Currently Amended) The device for controlling an imaging lens position according to Claim 2, wherein

said means for computing the high-frequency ~~a high-frequency~~ component index comprises:

a scanner, which starts scanning information relating to the distribution ~~a distribution~~ of high-frequency components in the ~~a~~ predetermined position in the frame ~~a frame~~ as a starting position for scanning.

4. (Currently Amended) The device for controlling an imaging lens position according to Claim 3, wherein

said means for computing the high-frequency ~~a high-frequency~~ component index computes information relating to an increase of integration, which indicates an increase of integration value of an image signal along a scanning path of the scanner ~~a scanner~~; and

said means for generating selection information ~~information~~ dependent on a high-frequency component index ~~index~~ generates selection information for selecting information relating to the distribution ~~a distribution~~ of high-frequency components having the largest increase according to information relating to the increase ~~an increase~~ of integration.

5. (Currently Amended) The device for controlling an imaging lens position according to Claim 3, wherein

said means for computing the high-frequency ~~a high-frequency~~ component index computes information relating to an amount of scanning as the high-frequency ~~a high-frequency~~ component index, which indicates an amount of scanning by a the scanner ~~scanner~~ until the maximal value of the high-frequency ~~a high-frequency~~ component of an image signal appears; and

said means for generating selection information dependent on the high-frequency a high-frequency-component index generates selection information for selecting information relating to the distribution a distribution of high-frequency components having the smallest value of information relating to the amount of scanning.

6. (Currently Amended) The device for controlling an imaging lens position according to Claim 2, wherein

the high-frequency component index is barycentric deviation information indicating a distance between a barycentric position of the high-frequency a high-frequency-component and the predetermined a predetermined position; and

said means for generating selection information, ~~information~~-dependent on a high-frequency component index, ~~which~~-generates selection information for selecting information relating to the distribution a distribution of high-frequency components having the smallest value of the barycentric deviation information.

7. (Currently Amended) The device for controlling an imaging lens position according to any one of Claims 2 to 6, wherein the predetermined position is a central point of the frame a frame.

8. (Currently Amended) The device for controlling an imaging lens position according to any one of Claims 2 to 6, further comprising:

a setting unit that for a predetermined position, ~~which~~-sets the predetermined position.

9. (Currently Amended) The device for controlling an imaging lens position according to Claim 1, wherein

the information relating to the distribution of high-frequency components indicates a size of the high-frequency ~~a high-frequency~~ component corresponding to respective positions of a predetermined area in the frame ~~a frame~~; and

said acquirer for selection information comprises:

means for displaying an image of the distribution of high-frequency components, which displays information relating to the distribution ~~a distribution~~ of high-frequency components as an image stored in said ~~first~~ storage; and

means for inputting a selection, which acquires selection information from an operator based on the image of the distribution of high-frequency components displayed by said means for displaying the ~~an image of the~~ a ~~a~~ distribution of high-frequency components.

10. (Currently Amended) A device for controlling an imaging lens position, which performs a control of focusing based on a distribution of high-frequency components of image signals in a frame, which is acquired according to a focus lens position, comprising:

an acquirer for information relating to a lens position of a peak focus, which acquires information relating to a lens position of a peak focus, said information indicating which ~~indicates~~ a focus lens position, at ~~in~~ which an integration value of said high-frequency component in a predetermined area in said frame assumes a peak;

a computer ~~for a high-frequency component index~~, which computes a high-frequency component index indicating the distribution ~~a distribution~~ of said high-frequency component in a relationship with the predetermined ~~a predetermined~~ position in the frame;

a ~~second~~-storage, which stores ~~the high-frequency~~ a high-frequency-component index; which is computed by the computer ~~at the~~ for a high-frequency component index at a focus lens position indicated by the information relating to ~~the~~ a-lens position of a peak focus, in which the high-frequency component index is correlated with the information relating to a lens position of a peak focus, which is acquired by the acquirer for information relating to ~~the lens~~ a-lens-position of ~~the~~ a-peak focus;

an acquirer ~~for selection information~~, which acquires selection information indicating which high-frequency component index stored by the ~~second~~-storage is selected based on the high-frequency component index stored by the second storage; and

a determinator ~~for an imaging lens position~~, which determines, when more a plurality of information relating to the lens position of the peak focus have been acquired, the imaging an imaging-lens position, the focus a-focus-lens position for imaging, based on the information relating to ~~the~~ a-lens position of ~~the~~ a-peak focus correlated with the high-frequency component index and stored in the second storage,

wherein the selection information acquired by the acquirer, which acquires selection information, for selection information indicates that the high-frequency component index has been selected.

11. (Previously Presented) The device for controlling an imaging lens position according to any one of Claims 1-6, 9, and 10, wherein an image signal is a luminance signal.

12. (Previously Presented) The device for controlling an imaging lens position according to any one of Claims 1-6, 9, and 10, wherein an image signal is a signal acquired from one or a combination of RGB signals.

13. (Previously Presented) The device for controlling an imaging lens position according to any one of Claims 1-6, 9, and 10, wherein an image signal is a signal acquired from one or a combination of CMYG signals.

14. (Currently Amended) A method for controlling an imaging lens position, which performs a control of focusing based on a distribution of high-frequency components of image signals in a frame acquired according to a focus lens position, comprising:

acquiring information relating to a lens position of a peak focus, which acquires information relating to a lens position of a peak focus, which indicates a focus lens position, in which a integration value of said high-frequency component in a predetermined area in said frame assumes a peak;

storing information ~~indicating the relating to a distribution of high-frequency components, which indicates a distribution of said high-frequency component at the a-focus lens position indicated by the information relating to the a-lens position of the a-peak focus, in which the information indicating the relating to a distribution of high-frequency components is correlated with the information relating to the a-lens position of the a-peak focus, which is acquired by the step of acquiring information relating to a lens position of a peak focus;~~

acquiring selection information ~~indicating, which acquires selection information indicating~~ which information relating to a distribution of high-frequency components stored by

the step of storing is selected based on the information relating to the distribution ~~a distribution~~ of high-frequency components stored by the step of storing; and

determining, when a plurality of information relating to the lens position of the peak focus have been acquired, the ~~an imaging lens position, which determines an imaging lens position,~~ a focus lens position for imaging, based on the information relating to the ~~a~~ lens position of the ~~a~~ peak focus correlated with the information relating to the distribution ~~a distribution~~ of high-frequency components and stored by the step of storing, in which the selection information acquired by the step of acquiring selection information indicates that the information relating to the distribution ~~a distribution~~ of high-frequency components has been selected.

15. (Currently Amended) A method for controlling an imaging lens position, which performs a control of focusing based on a distribution of high-frequency components of image signals in a frame, which is acquired according to a focus lens position, comprising:

acquiring information relating to a lens position of a peak focus, ~~which acquires information relating to a lens position of a peak focus, which indicates a focus lens position, in~~ which an integration value of said high-frequency component in a predetermined area in said frame assumes a peak;

computing a high-frequency component index, indicating the ~~which computes a high-frequency component index indicating a~~ distribution of said high-frequency component in a relationship with a predetermined position in the frame;

storing the high-frequency component index, ~~which is computed by the~~ computing step ~~of computing high-frequency component index~~ at a focus lens position indicated by the



information relating to a lens position of a peak focus, in which the high-frequency component index is correlated with the information relating to a lens position of a peak focus, ~~which is~~ acquired by the step of acquiring information relating to a lens position of a peak focus;

~~acquiring selection information indicating, which acquires selection information~~  
~~indicating~~ which high-frequency component index stored by the step of storing is selected based on the high-frequency component index stored by the step of storing; and

~~determining, when a plurality of information relating to the lens position of the peak~~  
~~focus have been acquired, the~~ an imaging lens position, ~~which determines an imaging lens~~  
~~position,~~ a focus lens position for imaging, based on the information relating to ~~the~~ a-lens  
position of ~~the~~ a-peak focus correlated with the high-frequency component index and stored by  
the step of storing, in which the selection information acquired by the step of acquiring selection  
information indicates that the high-frequency component index has been selected.

16. (Currently Amended) A device for controlling an imaging lens position, comprising:

~~an acquirer for an image signal,~~ which acquires an image signal from a large frame region  
in an imaging region and from a small frame region, which is a portion of the large frame region,  
in which the large frame region and the small frame region are correlated with a focus lens  
position;

~~an acquirer for contrast information,~~ which acquires contrast information indicating  
contrast from said image signal, which is correlated with said focus lens position;

~~an acquirer for information relating to a lens position of a peak focus~~, which acquires information relating to a lens position of a peak focus indicating the a-focus lens position having a peak indicated by said contrast information; and

~~a determinator for an imaging focus lens position~~, which determines suitable focus lens position for imaging, wherein

said determinator ~~for an imaging focus lens position~~ determines the an-imaging focus lens position if information relating to the a-lens position of the a-peak focus is acquired from said small frame region, based on that information relating to the a-lens position of the a-peak focus, and if information relating to the a-lens position of the a-peak focus is not acquired from said small frame region, based on information relating to the a-lens position of the a-peak focus of said large frame region.

17. (Previously Presented) The device for controlling an imaging lens position according to Claim 16, wherein the image signal is a luminance signal.

18. (Previously Presented) The device for controlling an imaging lens position according to Claim 16, wherein the image signal is a signal acquired from one or a combination of RGB signals.

19. (Currently Amended) The device for controlling an imaging lens position according to Claim 16, wherein the image ~~an image~~-signal is a signal acquired from one or a combination of CMYG signals.

20. (Currently Amended) The device for controlling an imaging lens position according to any one of Claims 16 to 19, wherein said small frame region is arranged in a the central portion of said large frame region.

21. (Currently Amended) The device for controlling an imaging lens position according to any one of Claims 16 to 19, further comprising:

a ~~changer-for-arrangement~~, which changes the arrangement of at least one of said small frame region and large frame region.

22. (Currently Amended) The device for controlling an imaging lens position according to Claim 20, further comprising:

a ~~changer-for-shape-of-region~~, which changes at least one of the size and aspect ratio of said small frame region and/or large frame region.

23. (Previously Presented) The device for controlling an imaging lens position according to any one of Claims 16 to 18, wherein a plurality of said small frame regions is arranged in one of said large frame regions.

24. (Currently Amended) The device for controlling an imaging lens position according to Claim 23, wherein a plurality of said large frame regions is arranged ~~are arranged in~~ an imaging region.

25. (Currently Amended) ~~25.~~—A device for controlling an imaging lens position comprising:

an ~~acquirer for an image signal~~, which acquires image signals from a large frame region in an imaging region, from a small frame region, which is a portion of the large frame region, and from a middle frame region, which includes said small frame region and is included in said large frame region, in which the large frame region, the small frame region, and the middle frame region are correlated with a focus lens position;

an ~~acquirer for contrast information~~, which acquires contrast information indicating contrast from said image signal, which is correlated with said focus lens position;

an ~~acquirer for information relating to a lens position of a peak focus~~, which acquires information relating to a lens position of a peak focus indicating a focus lens position having a peak indicated by said contrast information; and

a ~~determinator for an imaging focus lens position~~, which determines suitable focus lens position for imaging, wherein

said ~~determinator for an imaging focus lens position~~, which determines an imaging focus lens position based on information relating to the a-lens position of the a-peak focus of said small frame region if the information relating to the a-lens position of the a-peak focus is acquired from said small frame region, which determines the an-imaging focus lens position based on information relating to the a-lens position of the a-peak focus of said middle frame region if the information relating to the a-lens position of the a-peak focus is not acquired from said small frame region, and which determines an imaging focus lens position based on information relating

to a lens position of a peak focus of said large frame region if the information relating to the a lens position of the a-peak focus is not acquired from said middle frame region.

26. (Original) The device for controlling an imaging lens position according to Claim 25, wherein said middle frame region comprises a plurality of middle frame regions having a further inclusive relationship.

27. (Previously Presented) The device for controlling an imaging lens position according to claim 7, wherein an image signal is a luminance signal.

28. (Previously Presented) The device for controlling an imaging lens position according to claim 8, wherein an image signal is a luminance signal.

29. (Previously Presented) The device for controlling an imaging lens position according to claim 7, wherein an image signal is a signal acquired from one or a combination of RGB signals.

30. (Previously Presented) The device for controlling an imaging lens position according to claim 8, wherein an image signal is a signal acquired from one or a combination of RGB signals.

31. (Previously Presented) The device for controlling an imaging lens position according to claim 7, wherein an image signal is a signal acquired from one or a combination of CMYG signals.

32. (Previously Presented) The device for controlling an imaging lens position according to claim 8, wherein an image signal is a signal acquired from one or a combination of CMYG signals.

33. (Currently Amended) The device for controlling an imaging lens position according to claim 21, further comprising:

a changer ~~for shape of region~~, which changes at least one of the size and aspect ratio of said small frame region and/or large frame region.

34. (Previously Presented) The device for controlling an imaging lens position according to claim 19, wherein a plurality of said small frame regions is arranged in one of said large frame regions.

35. (Previously Presented) The device for controlling an imaging lens position according to claim 34, wherein a plurality of said large frame regions are arranged in an imaging region.